

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit 2837

Kimberly Lockett, Primary Examiner



Attorney Docket No.: 2647-004

In re Patent Application of: Jeffrey T. Babicz

Serial No.: 10/816,479

Filing Date: April 1, 2004

For: String Instrument

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RESPONSE TO FINAL REJECTION**

Dear Examiner Lockett:

This is in response to the Office Action mailed June 30, 2006.

(1) Applicant notes that claims 8 and 17 have been allowed. The other claims remain unchanged.

(2) The rejection of claims 1,2,9 and 6 under 35 U.S.C. 103(a) on Bunker in view of Taylor and Fender is respectfully traversed. The claims are believed to be patentably distinguishable by calling for "continually adjustable means to move said neck vertically without changing the angle of said neck relative to said body, said continually adjustable means including a vertical movement means for causing relative vertical movement only between said neck and said body without loosening said neck from said body."

Bunker discloses a stringed instrument that provides for lateral displacement of the distal end of the instrument's neck relative to its body. Moreover, Bunker's design will only work in an electric guitar with a solid body to support the tight fitting neck, whereas

Applicant relies on the inner and outer neck heel attached to a neck block in a clamping manner.

Bunker is not even concerned with relative vertical movement between the neck and body of the instrument. Rather, Bunker utilizes a truss rod 20 embedded within the neck for adjusting the curve or bow or relief of the neck and to counter the string's tensile force (the tendency of the strings to bow the neck). Adjustment of Bunker's rod either adds curvature to, in one direction, or straightens out the neck when actuating the rod in the opposite direction. Bunker has nothing to do with action height or adjustment of the height of the strings relative to the neck's frets.

Taylor discloses a stringed instrument with adjustment means to move the neck vertically relative to the instrument's body. Taylor fails to permit relative vertical movement "without loosening said neck from said body", as called for in Applicant's claims.

A simple comparison of Taylor's neck adjustment relative to Applicant's neck adjustment reveals the following.

In order to accomplish Taylor's neck adjustment, the following steps must be taken:

1. Detune strings;
2. Insert Allen wrench into first screw 75 and loosen;
3. Insert Allen wrench into second screw and loosen;
4. Insert Allen wrench into third screw 80 and loosen;
5. Slide neck into new desired position (by hand);
6. Insert Allen wrench into first screw 75 and tighten;
7. Insert Allen wrench into second screw 75 and tighten;

8. Insert Allen wrench into third screw 80 and tighten; and,
9. Retune strings and check to see that adjustment is satisfactory.

Note: Steps 1-9 must be repeated if proper adjustment was not achieved.

In order to accomplish Applicant's neck adjustment, only the following steps need be taken:

1. Insert Allen wrench into height adjustment screw (in trap plate); and,
2. Turn Allen wrench clock-wise or counter clock-wise to achieve desired neck height.

Further, Taylor does not use a height adjustment screw for moving the neck up and down. Nor does he have a way of moving the neck up and down automatically.

The Fender reference, U.S. Pat. No.3,550,496, does disclose a musical instrument with an adjustment means that allows movement. However, because of the structure of the adjustment means, the movement is not "without changing the angle of said neck relative to said body". Fender does not disclose "continually adjustable means to move said neck vertically" as called for in Applicant's claims. The Examiner's attention is directed to Column 5, lines 26-31 of Fender. Commercially, Fender's system is referred to as a "Micro Tilt" neck adjustment system. Fender relies upon a "tilting neck system", whereas Applicant's invention allows a player to make an instant neck adjustment and continue to play. Both Fender and Bunker stretch or slacken the strings so re-tuning is necessary. One familiar with the Fender neck adjustment system also knows that the mounting bolts attaching the neck to the body have to be re-tightened in order to re-stabilize the neck to body joint after the tilting screw has been loosened. Further, the mounting bolts have to be loosened in order to tighten the tilting screw; otherwise damage can occur to the mounting

bolts. Thus, in addition to the lack of vertical movement only, it cannot be said that there is any kind of movement without loosening the neck from the body, as contended by the Examiner.

The Examiner's attempt to combine Bunker with Taylor and then Fender would be improper. The Examiner would be resorting to an improper hindsight reconstruction of the invention in attempting to reject the claims, arbitrarily combining the Bunker body and neck assembly that provides for lateral displacement of the neck relative to the body, with Taylor's vertical adjustment feature that does not disclose "continually adjustable means including a vertical movement means for causing relative vertical movement only between said neck and said body without loosening said neck from said body", as called for in Applicant's claims, and then attempting to further combine the already improper combination with Fender which does not show movement "without changing the angle of said neck relative to said body", nor "vertical relative movement only between said neck and said body without loosening said neck from said body". And all this is done , despite the complete absence of any motivation to combine these references. It is improper to use that which only the inventor taught ... against its teacher, *W.L. Gore & Assocs.*, 220 USPQ 303,313 (Fed. Cir. 1983); *Ecolochem, Inc. v. S. Cal Edison Co.*, 56 USPQ 2d 1065,1073 (Fed. Cir. 2000); *In re Dembiczak*, 50 USPQ 2d 1614,1617 (Fed. Cir. 1999). Further, the Examiner's hindsight obviousness rejection would fall afoul of the rule that motivation to combine references for the purpose of an obviousness determination cannot be resolved based on "subjective belief and unknown authority", and that common knowledge and common sense cannot substitute for evidence, *In re Sang Lee*, 61 USPQ 2d 1430, 1433-35 (Fed. Cir. 2002); *In re Dembiczak, supra*.

3) The rejection of claims 3-5 and 10-16 under 35 U.S.C. 103(a) as being unpatentable over Bunker in view of Taylor, Steinberger and Fender is respectfully traversed and for the reasons given immediately above with respect to claims 1,2,9, and 6. In the undersigned's experience this is the first time a 103 rejection has been seen predicated on the combination of four references. The arguments with respect to the improper nature of the rejection are repeated here. Applicant also notes in the final sentence of the Examiner's rejection, the reference to lateral adjustment (page 5, second paragraph). Applicant's invention is directed to continuous vertical adjustment of the neck relative to the body. Further, Steinberger is but another example of an instrument where the movement of the neck relative to the body is not merely vertical. In Steinberger, the incline orientation of the spring-loaded bolts serves to urge the neck toward the rearward end of the guitar body. The biasing of the neck by virtue of the action of the spring member is to urge the neck toward the rearward of the recess in the guitar body as well as to urge the neck to pivot downwardly to fully seat in the recess (Column 10, lines 54-58 of Steinberger). Reconsideration, allowance and passage to issuance are respectfully requested. If there is any matter remaining that can be taken care of by telephone call or further interview, the Examiner is requested to contact the undersigned at the number shown below.

Respectfully submitted,

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By



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I hereby certify that the above amendment is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

A handwritten signature in black ink, appearing to read "Joseph L. Spiegel".

Joseph L. Spiegel